



Malaria and climate change: Discussion on economic impacts

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Abstract:

Problem statement: Climate change is a global environmental change that is adversely affecting human health by causing various health impacts in countries throughout the world. Climate is the most influential driving force of vector-borne diseases such as malaria. Changes in climate factors substantially affect reproduction, development, distribution and seasonal transmissions of malaria. Climate change increases the outbreak of malaria which causes adverse economic impacts in endemic regions. This study reviews literature related to economic impacts of malaria at different levels such as household and national level. The study also focuses on the impacts of malaria on the economic growth of various nations. Approach: Literatures were identified for review through a comprehensive search by using electronic and non-electronic databases. Several electronic databases were searched for published literature in a systematic way using a range of key words relating to economic impacts of malaria illness. Related literature and documents were also found through communicating with colleagues working in this research area. Related literature and documents were also found through communicating with colleagues working in this research area. Results: The literature review indicates that malaria causes great economic losses at household level through human morbidity and mortality and consequently lower labor productivity, disability and poverty. At the national level, malaria affects negatively the trade, investments, savings and tourism sector. Macroeconomic studies estimated that the annual growth rate of per capita GDP of malaria endemic countries was 0.25-1.3% points lower per year than that of non-malarious countries. Conclusion: Reducing the burden of malaria could help to break the vicious cycle between illness and poverty that contributes to economic growth of the endemic countries. Therefore, further research is urgently needed to ensure interventions for controlling the malaria disease more effectively in the advent of climate change.

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Resource Description

Exposure :

weather or climate related pathway by which climate change affects health

Unspecified Exposure

Geographic Feature:

resource focuses on specific type of geography

None or Unspecified

Climate Change and Human Health Literature Portal

Geographic Location:

resource focuses on specific location

Global or Unspecified

Health Impact:

specification of health effect or disease related to climate change exposure

Infectious Disease

Infectious Disease: Vectorborne Disease

Vectorborne Disease: Mosquito-borne Disease

Mosquito-borne Disease: Malaria

Mitigation/Adaptation:

mitigation or adaptation strategy is a focus of resource

Adaptation

Model/Methodology:

type of model used or methodology development is a focus of resource

Cost/Economic, Other Projection Model/Methodology

Other Projection Model/Methodology: discussion only

Population of Concern: A focus of content

Population of Concern:

populations at particular risk or vulnerability to climate change impacts

Low Socioeconomic Status

Resource Type:

format or standard characteristic of resource

Review

Timescale:

time period studied

Time Scale Unspecified

Vulnerability/Impact Assessment:

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content